FIG.1

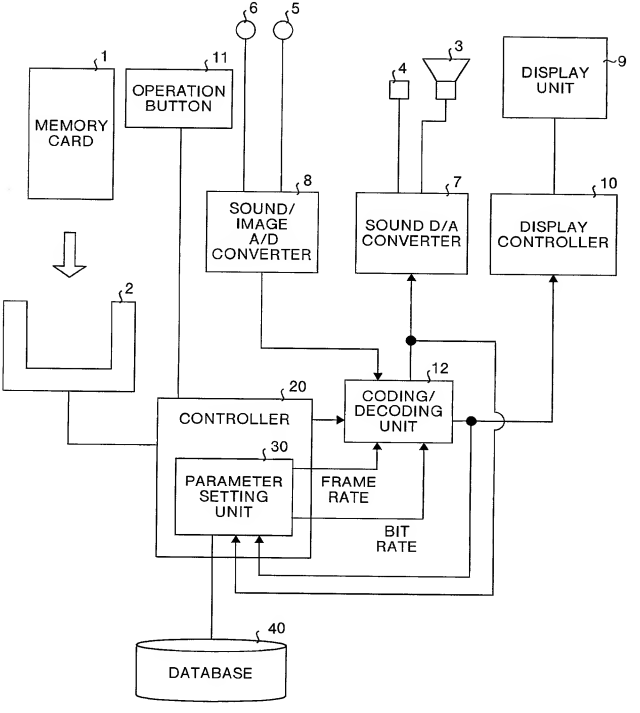

6
5
1
11
3
4
DISPLAY UNIT
9
MEMORY CARD
OPERATION BUTTON
8
7
10
SOUND/ IMAGE A/D CONVERTER
SOUND D/A CONVERTER
DISPLAY CONTROLLER
2
12
20
CONTROLLER
CODING/ DECODING UNIT
30
PARAMETER SETTING UNIT
FRAME RATE
BIT RATE
40
DATABASE

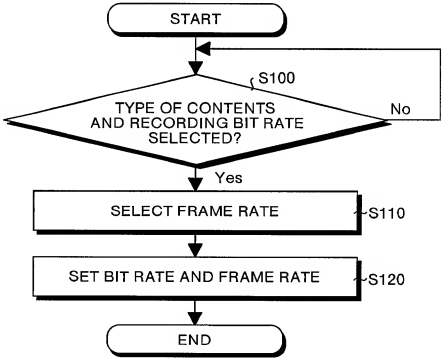
FIG.2

IMAGE SIZE (inch)	1.5~2	2~2.5	2.5~3
IMAGE RESOLUTION	SQVGA~QCIF	QCIF~HQVGA	HQVGA~CIF
FRAME RATE (fps)	8~15	10~15	10~20
BIT RATE (kbps)	32~128	64~256	128~512

FIG.3

TYPE OF CONTENTS	NEWS	BASEBALL BROADCASTING	DRAMA
IMAGE SIZE	2.0-inch	3.0-inch	2.5-inch
IMAGE RESOLUTION	QCIF	CIF	CIF
OPTIMAL FRAME RATE RANGE	5-10 (fps)	13-15 (fps)	10-12 (fps)
OPTIMAL FRAME IMAGE QUALITY RANGE	30-35 (dB)	30-32 (dB)	32-35 (dB)

FIG.4



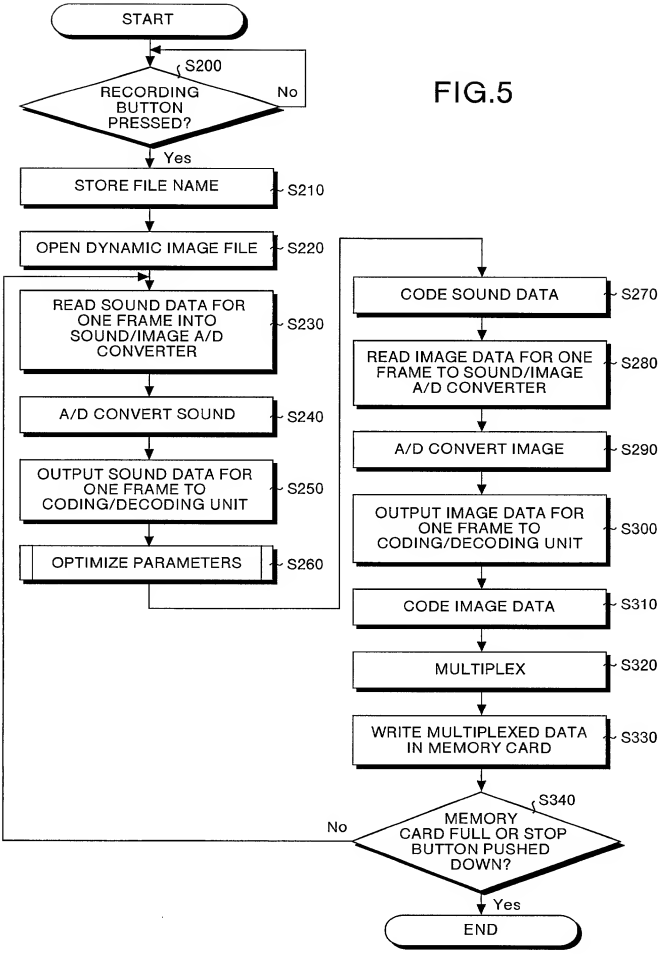
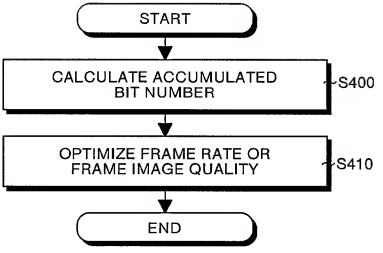

START
S200
RECORDING BUTTON PRESSED?
No
Yes
STORE FILE NAME
S210
OPEN DYNAMIC IMAGE FILE
S220
READ SOUND DATA FOR ONE FRAME INTO SOUND/IMAGE A/D CONVERTER
S230
A/D CONVERT SOUND
S240
OUTPUT SOUND DATA FOR ONE FRAME TO CODING/DECODING UNIT
S250
OPTIMIZE PARAMETERS
S260
CODE SOUND DATA
S270
READ IMAGE DATA FOR ONE FRAME TO SOUND/IMAGE A/D CONVERTER
S280
A/D CONVERT IMAGE
S290
OUTPUT IMAGE DATA FOR ONE FRAME TO CODING/DECODING UNIT
S300
CODE IMAGE DATA
S310
MULTIPLEX
S320
WRITE MULTIPLEXED DATA IN MEMORY CARD
S330
S340
MEMORY CARD FULL OR STOP BUTTON PUSHED DOWN?
No
Yes
END

FIG.5

FIG.6


START
CALCULATE ACCUMULATED BIT NUMBER
S400
OPTIMIZE FRAME RATE OR FRAME IMAGE QUALITY
S410
END

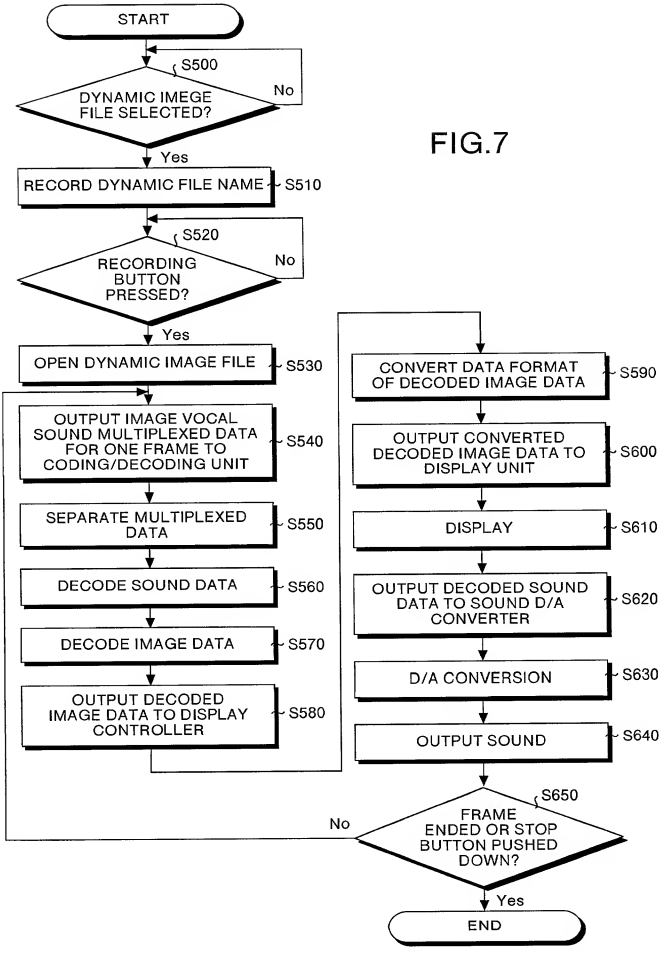

START
S500
DYNAMIC IMEGE FILE SELECTED?
No
Yes
RECORD DYNAMIC FILE NAME
S510
S520
RECORDING BUTTON PRESSED?
No
Yes
OPEN DYNAMIC IMAGE FILE
S530
OUTPUT IMAGE VOCAL SOUND MULTIPLEXED DATA FOR ONE FRAME TO CODING/DECODING UNIT
S540
SEPARATE MULTIPLEXED DATA
S550
DECODE SOUND DATA
S560
DECODE IMAGE DATA
S570
OUTPUT DECODED IMAGE DATA TO DISPLAY CONTROLLER
S580
CONVERT DATA FORMAT OF DECODED IMAGE DATA
S590
OUTPUT CONVERTED DECODED IMAGE DATA TO DISPLAY UNIT
S600
DISPLAY
S610
OUTPUT DECODED SOUND DATA TO SOUND D/A CONVERTER
S620
D/A CONVERSION
S630
OUTPUT SOUND
S640
S650
FRAME ENDED OR STOP BUTTON PUSHED DOWN?
No
Yes
END

FIG.7